NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

June 25-26, 2015

ACCIDENT SITE EXAMINATION SUMMARY

WPR15FA195

This document contains 6 embedded photos.

A. ACCIDENT

Location:	Maricopa, CA
Date:	June 22, 2015
Aircraft:	N206PZ; S312 Tucano T MK1
NTSB Investigator-in-Charge:	Andrew Swick

On June 22, 2015 about 0930 Pacific daylight time, an experimental exhibition category Short Brothers PLC S312 Tucano T MK1, airplane, N206PZ, was destroyed when it impacted terrain about 16 miles south of Maricopa, California. The private pilot, who was the sole occupant, was fatally injured. The aircraft was registered to Tucano Flyer LLC and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as personal flight. Visual meteorological conditions prevailed and a flight plan had not been filed. The flight originated from Camarillo Airport (CMA), Camarillo, California at 0810.

According to the Federal Aviation Administration (FAA), the pilot was in contact with the SoCal Air Route Traffic Control Center (ARTCC) and was receiving advisories while maneuvering over the Chumash Wilderness area. Radar reviewed by NTSB investigators depicted multiple turns, rapid changes in altitude, and airspeed. At 0925 radar contact was lost and no other communication was received from the pilot.

A witness stated that the airplane flew directly over his house in straight and level flight between 500 and 750 feet above ground level (AGL). He further stated that the sound was different than other airplanes that fly in the area, but it didn't sound like anything was wrong. The airplane continued to fly straight and level in an easterly direction towards Quatal Canyon road.

Another witness located at her residence on Quatal Canyon road, was about 1 mile northeast from the first witness's location. She was outside when she saw the airplane circle her home and depart eastward paralleling Quatal Road and proceeded to fly up the canyon. She further stated that the airplane was about 500 feet AGL. The engine sound was loud and consistent. After losing sight of the airplane behind a small hill, smoke and dust was seen rising from the canyon.

B. PARTICIPANTS

Andrew Swick-NTSB IIC
Van McKenny-NTSB
Jack Vanover-NTSB
Sean T. Kaveney-FAA-FSDO
Martin Jay Kruse-Honeywell Aerospace

C. SUMMARY

Examination of the accident site was conducted on June 23, 2015. All major structural components of the airplane were located at the accident site. The wreckage was recovered to a secure location for further examination.

D. DETAILS OF THE INVESTIGATION

1.0 Accident Site Examination

Main Wreckage: N34 49’26.2”, W-119 24’46.6” – Elevation: 3,300 feet

Accident site was about 15 miles south of Maricopa, California
Accident site was about 1/4 mile northeast from the last radar target

Examination of the accident site revealed that the wreckage was in a dry creek bed. The airplane had been destroyed by high impact forces and a postimpact fire. The debris field was 641 feet in length and 355 feet wide. Postimpact fire was observed along the debris path and throughout the surrounding terrain. About 1 acre of land was burned.

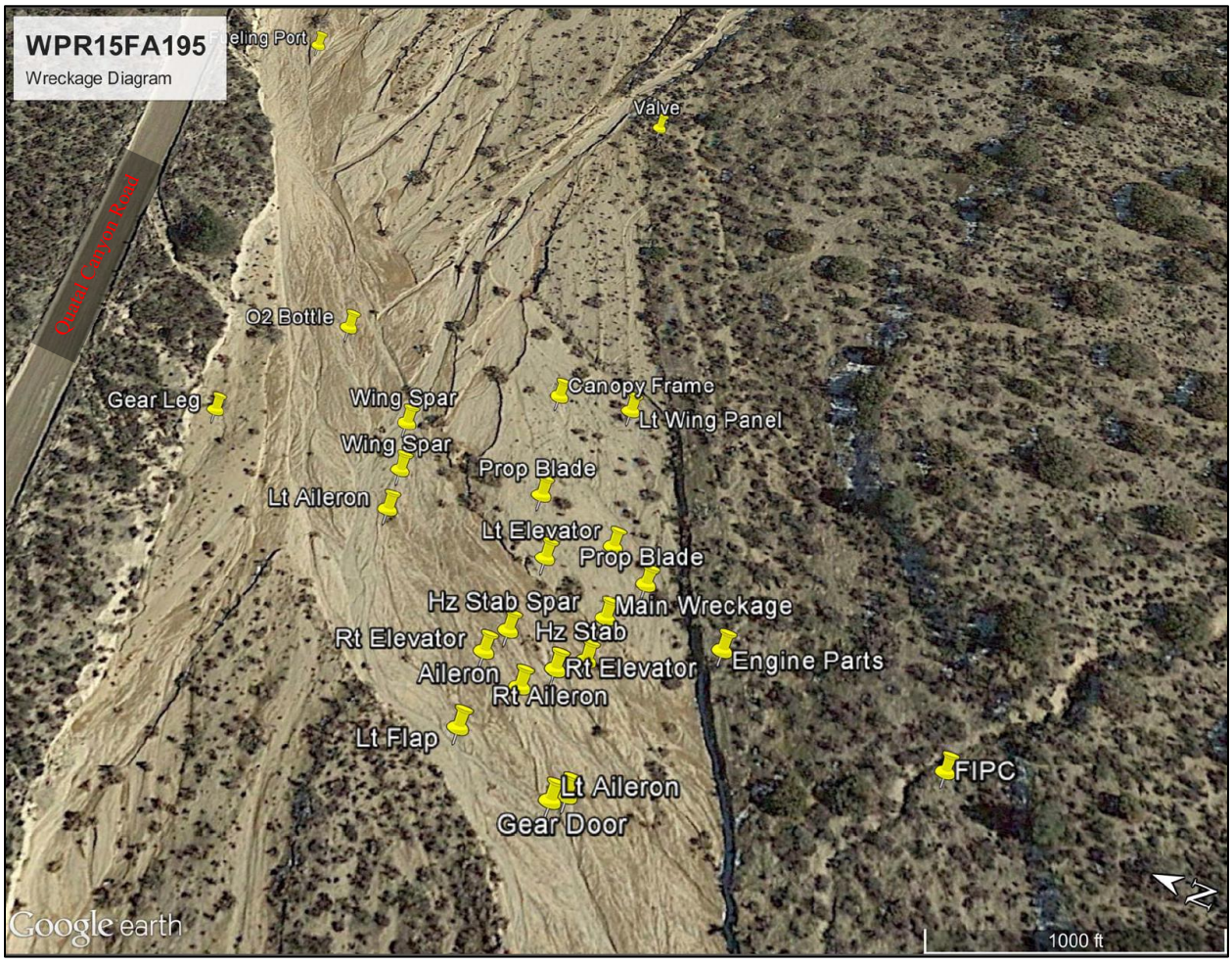

Figure 1-Aerial View of the Accident Site

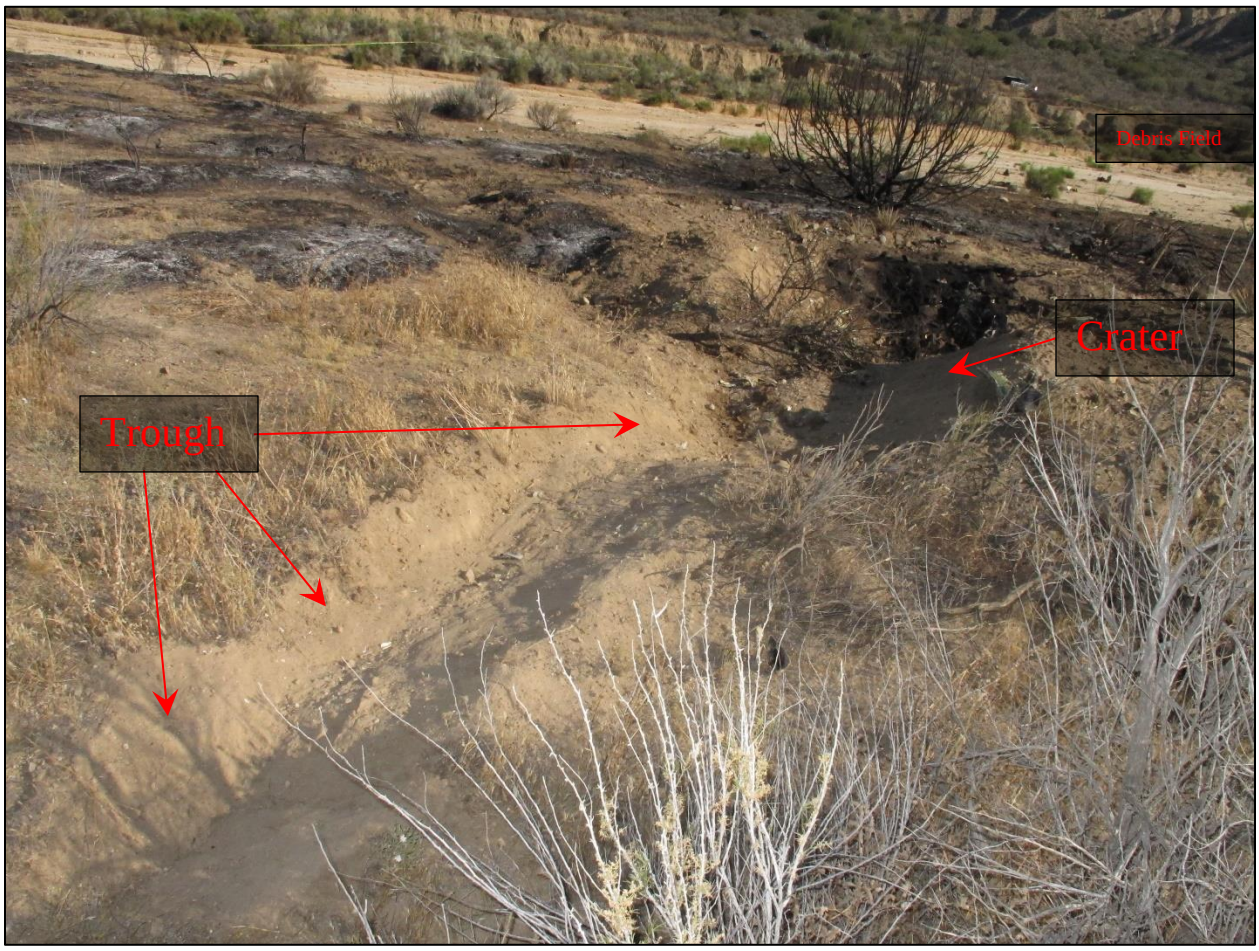

Figure 2-Onsite FIPC

The first identified point of contact (FIPC) was a trough of disturbed ground about 2 feet wide, about 20 feet in length and 1 foot in depth. The direction of the wreckage debris path was oriented a heading of a about 360 degrees magnetic from the FIPC to the main wreckage. A green light emitting diode (LED) navigation light was found near the FIPC. At the end of the trough was a crater was about 11 feet in diameter and about 5 feet deep. Two separated propeller blades, a landing gear strut with attached wheel and distorted pieces of sheet metal was found in and near the crater. The dirt in the crater was discolored and had the odor of fuel. The propeller blades revealed s-type bending, chordwise scoring, and leading edge gouging near the tip.

Figure 3-Main Wreckage

The main wreckage was found 180 feet from the FIPC. Another propeller blade, wing and fuselage sections and the engine bull gear assembly were found between the crater and the main wreckage. The main wreckage was twisted and distorted and consisted of the empennage, aft fuselage, firewall and the engine. Wire bundles and cabin instrumentation was found with the main wreckage and was burned and crushed. The pilot's body and attached parachute was found a few feet past the main wreckage. The canopy was found in several sections and was found past the main wreckage down the center of the debris field. A single-point refueling port was the last piece of wreckage in the debris field and was 641 feet from the FIPC. The aft fuselage and tail section structure was partially intact and cable control continuity was attained to the mid-section of the fuselage. Aileron control cables were located with the main wreckage. All primary flight controls were located in the debris field.

Figure 4-Propeller Blades

The last propeller blade was about 80 feet past the main wreckage. The last two propeller blades in the debris field revealed s-type bending, chordwise scoring, and leading edge gouging near the tips.

Figure 5-Engine Compressor Impeller

The engine had thermal discoloration, impact damage and was found in three sections. The first stage of compression impeller was visible and all of the blades revealed rotational signatures.

Figure 6-Engine Compressor Housing

The second-stage of compression was visible from the damaged housing and revealed rotational signatures.

The wreckage was relocated to a secured facility for further examination.